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British 1870
June 3, 1870

Cutlery Scourers.

A.D. 1870, June 3, N° 1613
NEWTON'S Specification

FIG. 2

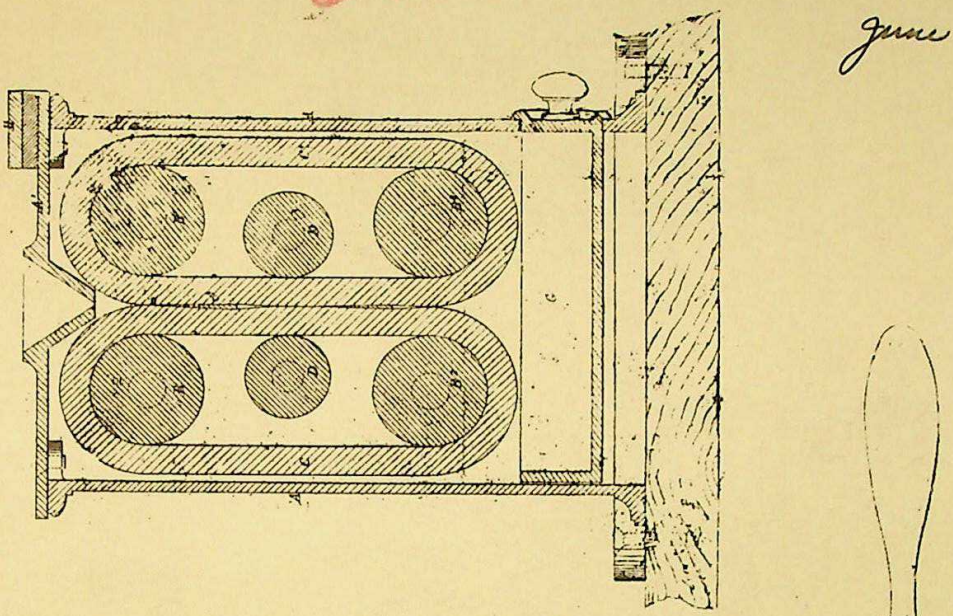
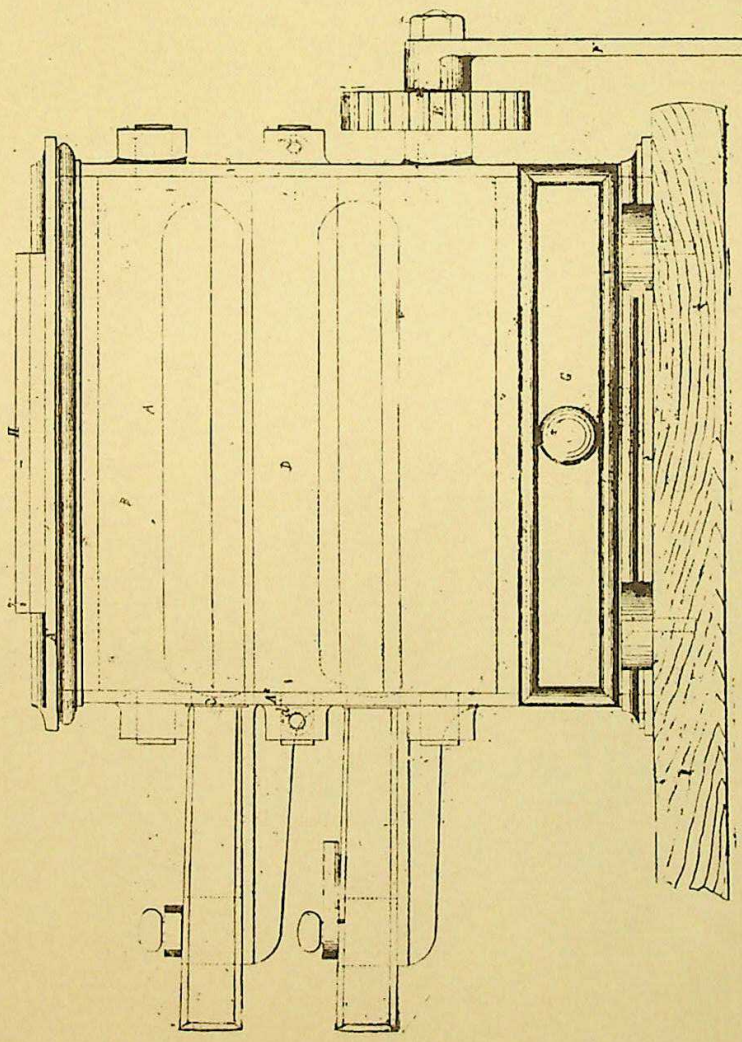


FIG. 1.



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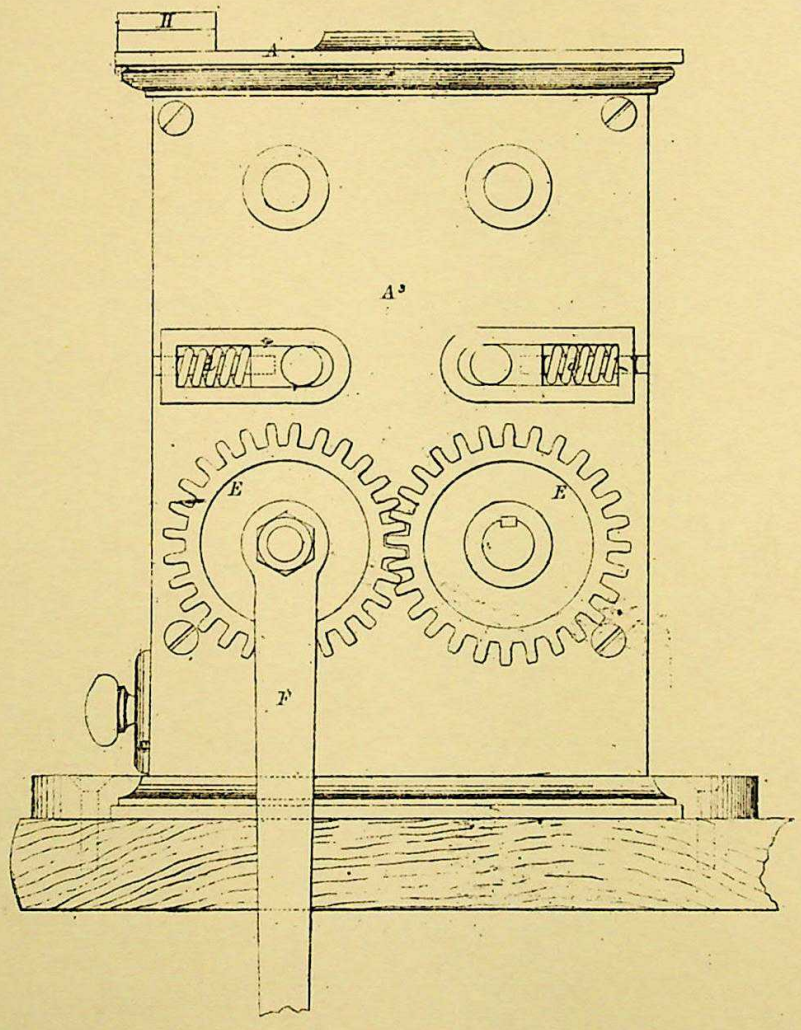
61. GRINDING AND POLISHING,
Metal,
Cutlery Scourers.

1613 of 1870

FIG. 3.



A.D. 1870, 3rd JUNE. N° 1613.

Apparatus for Cleaning Knives.

LETTERS PATENT to Alfred Vincent Newton, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for the Invention of "IMPROVED APPARATUS FOR CLEANING KNIVES."—A communication from abroad by J. A. Weston, of Paris, in the Empire of France.

Sealed the 4th October 1870, and dated the 3rd June 1870.

PROVISIONAL SPECIFICATION left by the said Alfred Vincent Newton at the Office of the Commissioners of Patents, with his Petition, on the 3rd June 1870.

I, ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, do hereby declare the nature of the said Invention for "IMPROVED APPARATUS FOR CLEANING KNIVES," to be as follows:—

This Invention relates to a novel construction of apparatus for cleaning knives, the object being to construct an efficient knife cleaner at comparatively small cost. To this end two endless bands of leather are used as the travelling friction surfaces, between which the knife blades are

to be inserted. These bands are set up vertically on horizontal tension rollers contained in a case or box. This case may be conveniently made of cast iron, having at the top a hopper for the reception of the brickdust or other polishing powder, which descending therefrom is distributed over the leather belts. At bottom the case is provided with a drawer for catching the powder as it falls from the belts. One end of the case is slotted to admit the knife blades and rests are provided to support their handles which may be held firmly by catches or clips. The bottom rollers are geared together and worked by a winch handle.

In adapting the apparatus for cleaning more than one knife at a time three bands may be used, set side by side, or the pair of belts may be lengthened and guide rollers or guide bars introduced between the bolts so as to press the endless friction surfaces forwards and keep them in contact with the blades that the upper blade may not hold the belts apart and thus prevent them from acting efficiently against the lower blade or blades. These guide rollers or bars may be self-adjusting by means of springs applied thereto either within or outside the case. A leather pad is fitted on the case on which to finish the cleaning of carving knives when their blades are longer than the breadth of the belts.

SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said Alfred Vincent Newton in the Great Seal Patent Office on the 3rd December 1870.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Third day of June, in the year of our Lord One thousand eight hundred and seventy, in the thirty-third year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Alfred Vincent Newton, Her special licence, that I, the said Alfred Vincent Newton, my executors, administrators, and assigns, or such others as I, the said Alfred Vincent Newton, my executors, administrators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the

term therein expressed should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "IMPROVED APPARATUS FOR CLEANING KNIVES," being a communication to me from abroad by J. A. Weston, of Paris, in the Empire of France, upon the condition (amongst others) that I, the said Alfred Vincent Newton, my executors or administrators, by an instrument in writing under my, or their, or one of their hands and seals, should particularly describe and ascertain the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said Alfred Vincent Newton, do hereby declare the nature of the said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement, reference being had to the Drawing hereunto annexed, and to the letters and figures marked thereon (that is to say) :—

This Invention relates to a novel construction of apparatus for cleaning knives, the object being to construct an efficient knife cleaner at comparatively small cost. To attain this object endless belts or bands of leather are employed as the travelling friction surfaces between which the knife blades are to be inserted. These bands are set up vertically on horizontal tension rollers contained in a case or box, and rotary motion being communicated to the bands while the knife blades presented to them are held fast the cleaning of the knives will be readily effected.

In the accompanying Drawings Fig. 1 is a front elevation of the improved knife cleaner; Fig. 2 is a transverse vertical section of the same; and Fig. 3 is an elevation of the gearing end of the box or case.

A, A, is a rectangular case made by preference of cast iron. The top A^1 of the case is cast with a hopper for the reception of the brick-dust or other polishing powder employed; A^2, A^3, are the end plates cast with bearings for the rollers. The plate A^2 is cast with vertical slots for the admission of knife blades into the box, and it is also provided with brackets for supporting the handles of the knives to be cleaned. The several plates A^1, A^2, A^3, are secured to the main casting by screws, as shewn ;

B, B^1, and B^2, B^3, are two pairs of tension rollers over which are stretched endless belts formed of buff leather or other equivalent material C, C^1. These belts are brought together so as to touch and remain in contact while passing through the vertical plane which cuts the centre of the hopper. If, therefore, a knife blade is thrust between the belts it will receive friction therefrom on both sides and will be speedily polished.

In order, however, to allow of more than one knife being acted on simultaneously pressing rollers are provided, as shewn at D, D, which will serve to press back into position the belts when bent out of their course by the thickness of the knife blade which they have just passed, and thus enable the belts to act efficiently on a second blade. By the use of more than one pair of rollers D and a corresponding lengthening of the endless bands three or more knives may be acted on simultaneously by the machine. The rollers D may be held up to their work by adjusting screws or by coiled springs *d*, *d*, lying in recesses cast in the end plates A^2, A^3, and pressing forward sliding blocks that bear against the the axles of the rollers. The bands are driven by a pair of spur wheels E, E, keyed on the extended axles of the lower rollers, and on the squared end of the axle of one of these rollers is fitted a winch handle F for giving rotary motion thereto. Below the bands a drawer G is provided for receiving the polishing powder that falls from the hopper between the bands. The knife blades being inserted in the slots of the plate A^2, the handles are secured to the rests or supports by swivel catches or clips.

In order to increase still further the cleaning capacity of the apparatus three bands may be used set side by side, and the lower rollers of each band geared together. Instead also of the pressing rollers guide bars may be introduced between the belts to press out the endless friction surfaces and keep them in contact with the blades that the upper blade may not hold the belts apart, and thus prevent them from acting efficiently against the lower blade or blades. These guide bars may like the rollers be self-adjusting by means of springs applied thereto either within or outside the case. H is a leather pad fitted on the top of the case on which to finish the cleaning of carving knives when their blades exceed in length the breadth of the leather friction belts or bands.

Having now set forth the nature of the Invention of "Improved Apparatus for Cleaning Knives," as communicated to me from abroad, and explained the manner of carrying the same into effect, I wish it to be

understood that under the above in part recited Letters Patent I claim,—

First. The use of smooth endless bands or belts arranged as described, and employed as friction surfaces for polishing knife blades on both sides simultaneously.

Secondly. The means described for causing a pair of endless bands or belts to act efficiently on two or more knife blades simultaneously.

In witness whereof, I, the said Alfred Vincent Newton, have hereunto set my hand and seal, the Third day of December, in the year of our Lord One thousand eight hundred and seventy.

A. V. NEWTON. (L.S.)

LONDON:
Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1870.